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Charles Muscrlain				
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Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/519,691
Filing Date: December 27, 2004
Appellant(s): PERAGINE ET AL.

Charles A. Muserlian
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/22/09 appealing from the Office action mailed 6/25/09.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary

of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. The brief is deficient because claim 18, which is a dependent claim argued separately fails to refer to the specification by page and line number.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

4,670,123	Pimlott et al.	6-1987
4,628,596	Currey et al.	12-1986

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pimlott et al. (Pimlott), U.S. Patent 4,670,123 in view of Currey et al. (Currey), U.S. Patent 4,628,596.

The Pimlott patent discloses the claimed electrode structure comprising a hollow body defining an internal volume (21) in fluid communication with a perimetrical chamber, said hollow body housing a reinforcing and electric current distributing internal element constituted by at least one sheet 12 provided with projections 14A, wherein

said projections have a shape equivalent to spherical caps or elliptic caps or caps with prismatic sections (see col. 2., lines 9-21 and figures 1 and 2). The patent teaches that the sheet has projections on both its major surfaces (see figure 2 and col. 4, lines 61-65). The sheet 12 provided with the projections 14 are secured to said conductive surface by means of an electrically conductive connection 14A (see col. 43-53). The conductive connection is located on the apex of the projections 14A. The projections 14 of the Pimlott patent are deformations, however, one having ordinary skill in the art would have been led by the disclosure to attach deformations by welding as recited in the claims.

The patent further discloses the claimed electrolysis cell (see col. 8, lines 33-68). The placement of the inlet and outlet would have been obvious to the ordinary artisan.

The patent also discloses the use of the electrolysis cell in the chlor-alkali electrolysis (see col. 1, lines 15-25) where the gas is allowed to freely circulate and nozzle or outlet to remove the claimed products removed (see col. 8, lines 33-45).

The patent does not explicitly disclose the same pattern or distance between adjacent projections. It would have been obvious to one having ordinary skill in the art to modify the disclosure of Pimlott to design the same pattern or distance, because the patent states that one having ordinary skill in the art would takes these types of factors into consideration in designing the invention disclosure (see col. 5, lines 29-47).

The Pimlott patent fails to disclose that chamber is delimited by a conductive surface provided with holes, such as a mesh, which are coated with chemically inert

porous diaphragm. The Currey patent teaches that in normal construction of cell, the diaphragm is in direct contact with the cathodic elements. Frequently, the diaphragm is deposited on the cathode by immersing the cathode in an aqueous slurry of asbestos... causing the slurry to flow through porous or mesh openings of the foraminous cathode until a porous sheet or layer of asbestos has been deposited on the sides of the cathode which is opposite the anode" (see col. 1, lines 30-49).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Pimlott by the teachings of Currey.

One having ordinary skill in the art would have been motivated to do this modification, because the Currey patent teaches the conventional use of electrode holes coated with chemically inert porous diaphragms.

(10) Response to Argument

Appellants argue that the present invention is directed to a diaphragm process, which is alleged to be different from the membrane process disclosed by Pimlott.

Pimlott discloses that the invention disclosed therein is an improvement on electrolysis cell, more particularly it relates to those of such cells which employ permselective ion exchange membranes, or hydraulically permeable diaphragms planarly disposed between flat surfaced, parallel porous electrodes (see col. 1, lines 5-24)

Appellants further argue that Pimlott is neither directed to a cathodic finger structure nor to a structural element or component of a diaphragm electrolyser, therefore it cannot anticipate or render obvious the claims of the instant application which is directed to a "cathodic finger structure of diaphragm electrolytic cell."

Merely because Pimlott does not use the words "finger" does not mean that it fails to disclose the structure recited therein. As demonstrated above, the Pimlott patent does disclose the claimed structure. The secondary reference to Currey renders the claims obvious.

Appellants next attack the Currey patent to state that the Currey patent fails to solve the technical problem of current distribution. The Pimlott patent solves the current distribution, since it uses the same shaped projections having conductive portions at the apex as recited in the instant claims.

Appellants further state that merely because the Pimlott patent discloses some of the difficulties in the prior art of diaphragm electrolyzer, that the structure recited therein would not be for a diaphragm electrolyzer.

The Pimlott patent however, explicitly states, that the invention disclosed therein is useful for both the cell using ion exchange membranes or cell having hydraulically permeable diaphragms (see col. 1, lines 5-13).

Appellants further argue that they don't subscribe to the view put forth by the examiner, "since claims recite structural features that are nowhere to be found in Pimlott or in any other type of membrane cell.

The arguments in the brief do not reference any structural features that are nowhere to be found in Pimlott. Other than the type of separator used, what are the alleged structural differences that a diaphragm cell would have that a membrane cell would not have. What portions of the claims recite these structural differences?

While an internet site is handy, it fails to solve the question what structural differences are represented by the different technologies. In particular, when the Pimlott patent teaches that the invention disclosed therein is suitable for either a diaphragm cell or membrane cell.

It is unclear to the examiner where appellants are basing the untenable argument that "Pimlott's invention is aimed at improving membrane cells without taking the older diaphragm technology into consideration. The Pimlott's invention is for both the cell employing membranes or cells employing diaphragms.

Appellants argue that Pimlott's cell has no cathode finger whatsoever. As stated above, merely because Pimlott does not call his structure "cathode finger" does not mean it fails to encompass the claimed invention.

Appellants further argue that Pimlott does not teach how to improve the conductivity of the cathodic structure. The Pimlott patent uses projections (14) having conductive connections (26) at the apex (14A) to improve conductivity of the cathodic structure, which is what is claimed in claim 5 of the instant application.

Appellants argue that at best, the Pimlott patent disclosed a membrane electrolysis chamber.

As stated above, the Pimlott patent discloses the same structure as recited in the claims.

Appellants argue that if equating membrane and diaphragms is incorrect, equating whole cell (sic) and an electrode of another cell is simply unbelievable.

The Pimlott at least two of the frames 10 to form an electrolytic cell (see col. 6, lines 28-42). Therefore, it is appellants who are equating the electrode disclosed in Pimlott for the unbelievable electrolytic cell. The Pimlott patent equates the membrane and diaphragm, because it teaches that the invention disclosed therein is useful in a diaphragm cell or a membrane cell.

Accordingly, the claims stand rejected.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Arun S. Phasge/

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